



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 6

1445 ROSS AVENUE, SUITE 1200  
DALLAS, TX 75202-2733

December 4, 2007

CERTIFIED MAIL 7004 1160 0003 0352 6637 RETURN RECEIPT REQUESTED

Mr. Paul Zawila  
ES&H Manager  
Solutia Inc.  
Chocolate Bayou Facility  
P.O. Box 711  
Alvin, TX 77512-0711

Re: Final Injection Well No Migration Exemption Reissuance Decision for WDW-318

Dear Mr. Zawila:

Effective the date of this letter, the Environmental Protection Agency (EPA) Region 6 approves the reissuance request for Solutia Inc.'s (Solutia) exemption to the land disposal restrictions for the WDW-318 well at the Chocolate Bayou facility in Alvin, Texas.

The land disposal restrictions prohibit the injection of hazardous waste unless a petitioner can demonstrate to EPA, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the injection zone for as long as the wastes remain hazardous. The land disposal restrictions for injection wells, codified in 40 CFR Part 148, provide the standards and procedures by which petitions to dispose of an otherwise prohibited waste by injection will be reviewed, and by which exemptions based on these petitions will be granted or denied.

A letter dated October 9, 2007, from Region 6 informed Solutia that EPA was proposing to approve Solutia's petition reissuance request for an exemption to the land disposal restrictions. The public comment period associated with this decision began on October 15, 2007, and closed on November 29, 2007. No comments were received.

Based on a detailed review of the submitted petition and support documents, EPA has determined that this information for Solutia's WDW-318 meets the requirements of 40 CFR Part 148 by demonstrating no migration of hazardous constituents from the injection zone for 10,000 years.

The following are conditions of this exemption to the land disposal restrictions:

Petition Reissuance Approval Conditions

This final petition for reissuance of exemption approval to allow the continued injection of restricted hazardous wastes is subject to the following conditions, which are necessary to assure that the standard in 40 CFR §148.20(a) is met. The final petition for reissuance of exemption approval conditions were revised to reflect the changes represented by this 2007 reissuance. Noncompliance with any of these conditions is grounds for termination of the exemption in accordance with 40 CFR §148.24(a)(1). This final reissued exemption is applicable to the existing injection well, WDW-318, located at the Solutia Chocolate Bayou Facility in Alvin, Texas.

1. Injection of restricted waste shall be limited to the following injection zone:

<u>Well</u>	<u>Depth of Injection Zone</u>
WDW-318	3078' - 7585' KB
(Depths referenced to 11/12/1994 Phasor Induction Density/Neutron/Gamma Ray Log)	

The injection interval shall be defined by the following correlative log depths:

<u>Well</u>	<u>Injection Interval</u>	<u>Depth of Injection Interval</u>
WDW-318	Sands 1, 1A, and 1B	4078' - 4640' KB
(Depths referenced to 11/12/1994 Phasor Induction Density/Neutron/Gamma Ray Log)		

2. The volume injected into WDW-318 during any given month shall not exceed that calculated by multiplying (1400 gpm)(1440 minutes/day)(number of days in that month).
3. The facility shall cease injection into WDW-318 on December 31, 2020.
4. The Characteristics of the injected waste stream shall for WDW-318 at all times conform to those discussed in Section 3.5 of the 2007 Petition Reissuance document for WDW-318. The specific gravity of the waste stream for WDW-318 shall remain within a range from 0.980 to 1.065 at 60°F and 1 atmosphere with a reference temperature of 60°F or within an equivalent specific gravity range of 0.980 to 1.065 at 68°F and 1 atmosphere with a reference temperature of 68°F.
5. The final approval for injection is limited to the following hazardous wastes:  
D001, D002, D003, D004, D005, D007, D008, D009, D010, D011, D018, D019, D038  
F001, F002, F003, F005, F006, F019, F024, F025, F034, F035, F037, F038, F039 (for the constituents listed in Table 3.5.1-I in the 2007 Petition Reissuance)  
K009, K010, K011, K013, K014, K026, K031, K083, K085, K087, K103, K104, K105  
P003, P016, P030, P031, P056, P063, P069, P098, P101, P105, P106



U001, U002, U003, U004, U005, U007, U008, U009, U012, U019, U046, U053, U056, U080, U122, U123, U124, U134, U135, U147, U152, U154, U161, U165, U188, U196, U197, U211, U220, U226, U239

6. The facility must petition for approval to inject additional hazardous wastes which are not included in Condition No. 5, above. The facility must also petition for approval to increase the concentration of any waste which would necessitate the recalculation of the limiting concentration reduction factor and the extent of the waste plume. Petition reissuances and modifications should be made pursuant to 40 CFR §148.20 (e) or (f).
7. The facility shall annually submit to EPA the results of a bottom hole pressure survey for WDW-318. This survey shall be performed after shutting in the well for a period of time sufficient to allow the pressure in the injection interval to reach equilibrium, in accordance with 40 CFR §146.68(e)(1). The annual report should include a comparison of reservoir parameters determined from the falloff test with parameters used in the approved no migration petition reissuance.
8. Upon the expiration, cancellation, reissuance, or modification of the Texas Commission on Environmental Quality's Underground Injection Control permit for Well WDW-318, this exemption is subject to review. A new demonstration may be required if information shows that the basis for granting the exemption is no longer valid under 40 CFR §148.23 and §148.24.

In addition to the above conditions, this final petition for reissuance of exemption approval is contingent on the validity of the information submitted in the Solutia reissuance request for an exemption to the land disposal restrictions. This final reissuance decision is subject to termination when any of the conditions occur which are listed in 40 CFR §148.24, including noncompliance, misrepresentation of relevant facts, or a determination that new information shows that the basis for approval is no longer valid.

If you have any questions or comments, please call Philip Dellinger at (214) 665-7150.

Sincerely yours,



Miguel I. Flores

Division Director

Water Quality Protection Division

cc: Robert Smith, USEPA OGWDW  
Ben Knape, TCEQ  
Brad Genzer, TCEQ Region 14

